

# Rosemount Differential Pressure Flowmeters and Primary Elements

Innovative Rosemount DP Flow technology enhances your flow measurement capabilities by expanding on time tested and proven technology.



[Rosemount Conditioning Orifice Flowmeters and Primary Elements](#)

Rosemount's Conditioning Orifice Flowmeters deliver unprecedented performance and eliminates the need for long straight pipe runs. Learn more today!

## Rosemount Conditioning Orifice Flowmeters and Primary Elements

**3051SFC, 3095MFC, 3051CFC, 2051CFC, 405, 1595**



Rosemount Conditioning Orifice Flowmeter technology provides unprecedented performance with minimal straight-run piping. Orifice metering is now more flexible and better than ever before.

Rosemount Conditioning Orifice Flowmeters are designed for ease of installation and maximum performance by eliminating the need for impulse lines, special flanges or piping modifications. Self-centering mechanisms ensure optimal accuracy while improving the overall installation process

Features of the Rosemount Conditioning Orifice include:

- Reduces pipe straight-run, requiring only 2D upstream and 2D downstream
- Provides superior performance of up to  $\pm 0.5\%$  accuracy in short straight-run installations
- Direct-mount capability providing "Best-in-Class" flowmeter solutions
- Savings in excess of 50% can be realized compared to a traditional orifice plate installation

Specifications

		
<b>Fully Integrated Flowmeter</b>	Rosemount 3051SFC_C with Measurement Types 1-4	Rosemount 3051SFC_C Measurement Type D
Accuracy	<ul style="list-style-type: none"> <li>•Mass flow up to 0.8% of mass flow rate, 14:1 turndown</li> <li>•Classic MV up to <math>\pm 0.85</math> % of flow rate, 8:1 flow turndown;</li> </ul>	<ul style="list-style-type: none"> <li>•Volumetric flow up to 0.8% of volumetric flow rate, 14:1 turndown</li> <li>•Classic MV up to <math>\pm 0.85</math>% of volumetric flow rate, 8:1 turndown</li> </ul>
Repeatability	$\pm 0.1$ %	$\pm 0.1$ %
Output	<ul style="list-style-type: none"> <li>•4-20mA signal based on HART® Communication</li> <li>•WirelessHART with Smart Wireless THUM adapter</li> </ul>	<ul style="list-style-type: none"> <li>•4-20mA signal based on HART®Communication</li> <li>•WirelessHART</li> <li>•FOUNDATION™ fieldbus</li> </ul>
Long Term Stability	Up to 15-year stability	Up to 15-year stability
Warranty	Up to 15-year limited warranty	Up to 15-year limited warranty
Diagnostics	<ul style="list-style-type: none"> <li>•User-writable process temperature sensor limits</li> <li>•Sensor Temperature as an output</li> <li>•Instant Flow Verification</li> </ul>	<a href="#">Advanced HART Diagnostic Suite</a>
Line Sizes	2-in (50 mm) 3-in (80 mm) 4-in (100 mm) 6-in (150 mm) 8-in (200 mm) 10-in (250 mm) 12-in (300 mm)	2-in (50 mm) 3-in (80 mm) 4-in (100 mm) 6-in (150 mm) 8-in (200 mm) 10-in (250 mm) 12-in (300 mm)

Rosemount Conditioning Orifice Flowmeters are designed for superior performance in limited space applications, such as:

- OEM Skid Manufactures
- Offshore platforms
- Retrofitting poorly performing standard orifice plate installations due to limited pipe straight run
- LNG carriers in Marine industry with small and limited space
- Engineering and Construction firms (saves design time)



